Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A method for storing data and checking the validity of stored data when such stored data is read, comprising:

transmitting the data from a source thereof, such data having a Cyclic Redundancy Code (CRC) for storage in a first storage device and transmitting thea CRC and together with parity ~~associated with such data~~ for storage in a second, different storage device;

retrieving the data stored in the first storage device;

determining a CRC associated with the retrieved data; and

comparing the determined CRC with the CRC stored in the second storage device.

2. (original) The method recited in claim 21 wherein the first storage device is a disk drive.

3. (currently amended) A method for storing data on a disk drive and checking the validity of data read from such disk drive, comprising:

transmitting the data from a source thereof for storage in the disk drive and transmitting a Cyclic Redundancy Code (CRC) together with parity associated with such data for storage in a different disk drive:

retrieving the data stored on the disk drive;

determining a CRC associated with the retrieved data; and

comparing the determined CRC with the CRC stored in a the second disk drive.

4. (original) The method recited in claim 3 wherein the second disk drive is a parity disk drive.

5. (currently amended) A method for storing data on a disk drive and checking the validity of data read from such disk drive, comprising:

transmitting the data from a source thereof for storage in the disk drive through a first transmission path and transmitting a Cyclic Redundancy Code (CRC) together with parity associated with such data for storage in a storage medium through a second path separate from the disk drive;

retrieving the data stored on the disk drive;

determining a CRC associated with the retrieved data; and

comparing the determined CRC with the CRC stored in the storage medium.

6. (currently amended) The method recited in claim 5 wherein the storage medium is a second disk drive.

7. (currently amended) The method recited in claim 6 wherein the second disk drive is a parity disk drive for storing a parity of the data transmitted by the source to the disk drive.

8. (currently amended) A method for storing a plurality of blocks of data on a corresponding one of a plurality of disk and checking the validity of plurality of blocks of data read from such disk drives, comprising:

transmitting the blocks of data from a source thereof for storage in the disk drives through a plurality of different transmission paths and transmitting Cyclic Redundancy Codes (-CRCs) together with parity associated with each one of the blocks of data for storage in a storage medium through a path separate the plurality of different transmission paths;

retrieving the blocks of data stored in the disk drives;

determining CRCs associated with the blocks of retrieved data; and

comparing the determined CRCs with the CRCs stored on the storage medium.

9. (original) The method recited in claim 8 wherein the storage medium is a second disk drive.

10. (original) The method recited in claim 9 wherein the second disk drive is a parity disk drive for storing a parity of the data transmitted by the source to the disk drive.

11. (new) A method for storing a stripe of data comprising a plurality of data blocks, each one of the plurality of blocks of data being stored on a corresponding one of a plurality of disk drives, such stripe of data having a data protection code, each one of the blocks of data having a parity, and checking the validity of the stripe of data read from such plurality of disk drives, comprising:

transmitting each one of the plurality of blocks of data, together with an associated data protection code, from a source of such blocks of data for storage in a corresponding one of the plurality of disk drives through a corresponding one of a plurality of different data directors, each one of the data directors writing the block of data transmitted thereto, into the corresponding one of the plurality of disk drives;

transmitting a parity associated with the plurality of blocks of data and a data protection code associated with each one of the blocks of data in the source for storage in a separate storage medium through a parity director separate from the plurality of data directors;

retrieving each one of the plurality of blocks of data stored in each one of the plurality of disk drives for the corresponding one of the plurality of data directors;

determining from each one of the plurality of data directors a data protection code associated with each one of the retrieved blocks of data;

comparing the determined data protection codes with the data protection codes stored in the separate storage medium; and

determining from such comparison, whether to rebuild the stripe of data.

12. (new) A method for storing a stripe of data comprising a plurality of data blocks, each one of the plurality of blocks of data being stored on a corresponding one of a plurality of disk drives, such stripe of data having a data protection code, each one of the blocks of data having a parity, and checking the validity of the stripe of data read from such plurality of disk drives, comprising:

transmitting each one of the plurality of blocks of data from a source of such blocks of data for storage in a corresponding one of the plurality of disk drives through a corresponding one of a plurality of different data directors, each one of the data directors writing the blocks of data transmitted thereto into the corresponding one of the plurality of disk drives;

transmitting parity associated with the plurality of blocks of data and a data protection code associated with each one of the blocks of data in the source for storage in a separate storage medium through a parity director separate from the plurality of data directors;

retrieving each one of the plurality of blocks of data stored in each one of the plurality of disk drives for the corresponding one of the plurality of data directors;

determining from each one of the plurality of data directors a data protection code associated with each one of the retrieved blocks of data;

comparing determined data protection codes with the data protection codes stored in the separate storage medium; and

determining from such comparison, whether to rebuild the stripe of data.